

11/29/01

JC951 U.S. PTO

12-03-01

PTO/SB/05 (08/00)

Please type a plus sign (+) inside this box → ☒Approved for use through 10/31/2002. OMB 0651-0032  
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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**UTILITY  
PATENT APPLICATION  
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	60706-1080
First Inventor	Duvaut et al.
Title	SYSTEM AND METHOD FOR INCREASING PAYLOAD CAPABILITY BY CLUSTERING UNLOADED BINS IN A DATA TRANSMISSION SYSTEM
Express Mail Label No.	EL891517893US

**APPLICATION ELEMENTS**  
See MPEP Chapter 600 concerning utility patent application contents**ADDRESS TO:** Assistant Commissioner for Patents  
Box Patent Application  
Washington, DC 20231☐ APPLICANT REQUESTS EARLY PUBLICATION UNDER 37 CFR 1.219 (additional fee)

- |   |   |
|---|---|
| <p>1. <input checked="" type="checkbox"/> Fee Transmittal Form (e.g., PTO/SB/17)<br/>(Submit an original, and a duplicate for fee processing)</p> <p>2. <input type="checkbox"/> Applicant claims small entity status.</p> <p>3. <input checked="" type="checkbox"/> Specification<br/>(preferred arrangement set forth below) [Total Pages <b>47</b>]</p> <ul style="list-style-type: none"><li>- Descriptive title of the invention</li><li>- Cross References to Related Applications</li><li>- Statement Regarding Fed. Sponsored R&amp;D</li><li>- Reference to sequence listing, a table, or a computer program listing appendix</li><li>- Background of the Invention</li><li>- Brief Summary of the Invention</li><li>- Brief Description of the Drawings (if filed)</li><li>- Detailed Description</li><li>- Claim(s)</li><li>- Abstract of the Disclosure</li></ul> <p>4. <input checked="" type="checkbox"/> Drawing(s) (35 USC 113) [Total Sheets <b>21</b>]</p> <p>5. Oath or Declaration [Total Pages <b>2</b>]</p> <p>a. <input checked="" type="checkbox"/> Newly Executed (original or copy)</p> <p>b. <input type="checkbox"/> Copy from a prior application (37 CFR §1.63(d))<br/>(for continuation/divisional with Box 18 completed)</p> <p>i. <input type="checkbox"/> <b>DELETION OF INVENTOR(S)</b><br/>Signed statement attached deleting inventor(s)<br/>named in the prior application,<br/>see 37 CFR 1.63(d)(2) and 1.33(b).</p> <p>6. <input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76</p> | <p>7. <input type="checkbox"/> CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)</p> <p>8. Nucleotide and/or Amino Acid Sequence Submission<br/>(if applicable, all necessary)</p> <p>a. <input type="checkbox"/> Computer Readable Copy (CRF)</p> <p>b. Specification Sequence Listing on.</p> <p>i. <input type="checkbox"/> CD-ROM or CD-R (2 copies), or</p> <p>ii. <input type="checkbox"/> Paper</p> <p>c. <input type="checkbox"/> Statements verifying identity of above copies</p> |
|---|---|

**ACCOMPANYING APPLICATION PARTS**

- |  |   |
|--|---|
| 9. <input type="checkbox"/> Assignment Papers (cover sheet & Documents(s))   |   |
| 10. <input checked="" type="checkbox"/> 37 CFR 3.73(b) Statement<br>(when there is an assignee)  | <input checked="" type="checkbox"/> Power of Attorney |
| 11. <input type="checkbox"/> English Translation Document (if applicable)  |   |
| 12. <input type="checkbox"/> Information Disclosure Statement (IDS)/PTO-1449   | <input type="checkbox"/> Copies of IDS Citations      |
| 13. <input type="checkbox"/> Preliminary Amendment   |   |
| 14. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503)<br>(Should be specifically itemized)  |   |
| 15. <input type="checkbox"/> Certified Copy of Priority Document(s)<br>(if foreign priority is claimed)  |   |
| 16. <input checked="" type="checkbox"/> Request and Certification under 35 U.S.C.<br>122(b)(2)(B)(i). Applicant must attach form<br>PTO/SB/35 or its equivalent. |   |
| 17. <input type="checkbox"/> Other:  |   |

**18. If a CONTINUING APPLICATION, check appropriate box and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:**☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No: /**Prior application information: Examiner****Group / Art Unit:**

For CONTINUATION OR DIVISIONAL APPS only, the entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. This incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**18. CORRESPONDENCE ADDRESS**☒ Customer Number or Bar Code Label **24504**  
(Insert Customer No. or Attach bar code label here) or ☐ Correspondence address below

NAME	Daniel R. McClure Thomas, Kayden, Horstemeyer & Risley, L.L.P.		
ADDRESS	100 Galleria Parkway Suite 1750		
CITY	Atlanta	STATE	Georgia
COUNTRY	U.S.A.	TELEPHONE	770-933-9500
		ZIP CODE	30339-5948
		FAX	770-951-0933

Name (Print/Type)	Daniel R. McClure	Registration No. (Attorney/Agent)	38,962
Signature	<i>Daniel R. McClure</i>	Date	Nov 29, 2001

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

# FEE TRANSMITTAL for FY 2002

Patent fees are subject to annual revision.

## Complete If Known

Application Number	To Be Assigned
Filing Date	Herewith
First Named Inventor	Duvaut, et al.
Examiner Name	To Be Assigned
Group / Art Unit	To Be Assigned
Attorney Docket No.	60706-1080

TOTAL AMOUNT OF PAYMENT (\$) **1788.00**

## METHOD OF PAYMENT

1. ☒ The Commissioner is hereby authorized to charge  
Indicated fees and credit any overpayments to:

Deposit Account Number: **20-0778**  
Deposit Account Name: **Thomas, Kayden, Horstemeyer Risley**

- ☒ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17  
☐ Applicant claims small entity status. See 37 CFR 1.27

2. ☒ **Payment Enclosed:**

☒ Check ☐ Money Order ☐ Credit Card ☐ Other

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid
101	740	201	370	Utility filing fee	\$740
106	330	206	165	Design filing fee	\$
107	510	207	255	Plant filing fee	\$
108	740	208	370	Reissue filing fee	\$
114	160	214	80	Provisional filing fee	\$
SUBTOTAL (1)					(\$740)

### 2. EXTRA CLAIM FEES

Total Claims	Extra Claims	Fee from below	Fee Paid
62	-20** = 42	x 18.00 =	756
Independent Claims	6	-3** = 3	x 84.00 = 252
Multiple Dependent		140.00 =	1008

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description
103	18	203	9	Claims in excess of 20
102	84	202	42	Independent Claims in excess of 3
104	280	204	140	Multiple dependent claims in excess of 3
109	84	209	42	**Reissue independent claims over original patent
110	18	210	9	**Reissue claims in excess of 20 and over original patent

\*\* or number previously paid, if greater; For Reissues, see above

SUBTOTAL (2) (\$1008)

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid
105	130	205	65	Surcharge - late filing fee	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	400	216	200	Extension of time within second month	
117	920	217	460	Extension of time within third month	
118	1,440	218	720	Extension of time within fourth month	
128	1,960	228	980	Extension of time within fifth month	
119	320	219	160	Notice of Appeal	
120	320	220	160	Filing a brief in support of an appeal	
121	280	221	140	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,280	241	640	Petition to revive - unintentional	
142	1,280	242	640	Utility issue fee (or reissue)	
143	460	243	230	Design issue fee	
144	620	244	310	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Processing fee under 37 CFR 1.17(q)	
126	180	126	180	Submission of Information Disclosure Stmt	
581	40	581	40	Recording each patent assignment per property (time number of properties)	40
146	740	246	370	Filing a submission after final rejection (37 CFR 1.129(a))	
149	740	249	370	For each additional invention to be examined (37 CFR 1.129(b))	
179	740	279	370	Request for Continued Examination (RCE)	
169	900	169	900	Request for expedited examination of a design application	
Other fee (specify)					
Other fee (specify)					

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) **40**

## SUBMITTED BY

Typed or Printed Name

**Daniel R. McClure**

Registration No. **38,962**  
(Attorney/Agent)

Telephone Number

**770-933-9500**

Signature

*Daniel R. McClure*

Date

**11-29-01**

Deposit Account User ID

**24504**

WARNING: Information on this form may become public. Credit Card information should not be included on this form. Provide credit card information and authorization on PTO-2038

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: **Duvaut et al.**For: **Clustering Modulation****CERTIFICATE OF EXPRESS MAIL**

Assistant Commissioner for Patents  
BOX: Patent Application  
Washington, D.C. 20231

Sir:

Enclosed for filing in the above case are the following documents:

Return Postcard  
Utility Patent Application Transmittal Page  
Fee Transmittal Page  
Patent Application Consisting Of:  
    29 Pages of Specification  
    17 Pages of Claims (Claims 1-62)  
    1 Page of Abstract  
    21 Pages of Formal Drawings (Figs. 1-15C)  
Declaration (executed)  
Request and Certification  
Assignment/Recordation Form Cover Sheet  
Check in the amount of \$1748.00  
Check in the amount of \$40.00 (assignment fee)

Further, the Commissioner is authorized to charge Deposit Account No. 20-0778 for any additional fees required. The Commissioner is requested to credit any excess fee paid to Deposit Account No. 20-0778

Respectfully submitted,

**Daniel R. McClure; Reg. No. 38,962****THOMAS, KAYDEN, HORSTEMEYER  
& RISLEY, L.L.P.**

100 Galleria Parkway, N.W.  
Suite 1750  
Atlanta, Georgia 30339-5948

Our Docket No: **060706-1080**

I hereby certify that all correspondences listed above are being deposited for delivery to the above addressee, with the United States Postal Service "**EXPRESS MAIL POST OFFICE TO ADDRESSEE**" service under 37 CFR §1.10 on the date indicated below:

The envelope has been given U.S. Postal Service "Express Mail Post Office To Addressee" Package # **EL891517893US**.

Date: Nov. 29, 2001  
**Hui Chin Barnhill**

# REQUEST AND CERTIFICATION UNDER 35 U.S.C. 122(b)(2)(B)(i)

First Named Inventor	Duvaut, et al.
Title	SYSTEM AND METHOD FOR INCREASING PAYLOAD CAPACITY BY CLUSTERING UNLOADED BINS IN A DATA TRANSMISSION SYSTEM
Attorney Docket No.	60706-1080

I hereby certify that the invention disclosed in the attached application **has not and will not be** the subject of an application filed in another country, or under a multilateral agreement, that requires publication at eighteen months after filing. I hereby request that the attached application not be published under 35 U.S.C. 122(b).

Nov. 29, 2001

Date

Daniel R. McClure

Signature

**Daniel R. McClure; Reg. No. 38,962**

Typed or printed name

This request must be signed in compliance with 37 CFR 1.33(b) and submitted with the application **upon filing**.

Applicant may rescind this nonpublication request at any time. If applicant rescinds a request that an application not be published under 35 U.S.C. 122(b), the application will be scheduled for publication at eighteen months from the earliest claimed filing date for which a benefit is claimed.

If applicant subsequently files an application directed to the invention disclosed in the attached application in another country, or under a multilateral international agreement, that requires publication of applications eighteen months after filing, the applicant **must** notify the United States Patent and Trademark Office of such filing within forty five (45) days after the date of the filing of such foreign or international application. **Failure to do so will result in abandonment of this application (35 U.S.C. 122(b)(2)(B)(iii)).**